

# United States Department of Agriculture Animal and Plant Health Inspection Service Plant Protection & Quarantine 4700 River Road Riverdale, MD 20737

# Permit to Move Live Plant Pests, Noxious Weeds, and Soil

**Interstate Movement** Regulated by 7 CFR 330

### This permit was generated electronically via the ePermits system

PERMITTEE NAME: Mr. William Shepherd **PERMIT NUMBER:** P526P-19-02140 APPLICATION California Academy of Sciences P526-190325-015 **ORGANIZATION: NUMBER:** 

ADDRESS: 55 Music Concourse Drive **FACILITY** 1508

c/o Steinhart Aquarium//Golden Gate Park **NUMBER:** San Francisco, ĈA 94118

MAILING ADDRESS: 55 Music Concourse Drive HAND CARRY:

No Golden Gate Park

San Francisco, CA 94118

**DATE ISSUED:** 05/06/2019 PHONE: 415-379-5448

FAX: 415-379-5705 **EXPIRES:** 05/06/2022 California Academy of Sciences, c/o Steinhart

**DESTINATION:** Aquarium, 55 Music Concourse Drive, Golden Gate

Park, San Francisco, CA 94118

RELEASE:

KELEASE:	INO				
Under the conditions specified, this permit authorizes the following:					
Regulated Article	Life Stage(s)	Intended Use	Shipment Origins	Originally Collected	Culture Designation
Adelpha fessonia	Pupae	Display Purposes - Butterfly House	HI, Continental U.S.	Originally Collected from Foreign and Domestic Locations	
Argema mimosae	Pupae	Display Purposes - Butterfly House	HI, Continental U.S.	Originally Collected from Foreign and Domestic Locations	
Argema mittrei	Pupae	Display Purposes - Butterfly House	HI, Continental U.S.	Originally Collected from Foreign and Domestic Locations	
Atrophaneura semperi	Pupae	Display Purposes - Butterfly House	HI, Continental U.S.	Originally Collected from Foreign and Domestic Locations	
Attacus atlas	Pupae	Display Purposes - Butterfly House	HI, Continental U.S.	Originally Collected from Foreign and Domestic Locations	
Attacus cesar	Pupae	Display Purposes - Butterfly House	HI, Continental U.S.	Originally Collected from Foreign and Domestic Locations	
Battus belus	Pupae	Display Purposes - Butterfly House	HI, Continental U.S.	Originally Collected from Foreign and Domestic Locations	
Battus polydamas	Pupae	Display Purposes - Butterfly House	HI, Continental U.S.	Originally Collected from Foreign and Domestic Locations	
Brassolis isthmia	Pupae	Display Purposes - Butterfly House	HI, Continental U.S.	Originally Collected from Foreign and Domestic Locations	

THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING PPQ HEADQUARTER OFFICIAL VIA EPERMITS.	DATE
Wayne It Widding	
Wayne Wehling	05/06/2019



Caligo atreus	Pupae	Display Purposes -	HI Continental	Originally Collected from Foreign
	1 upuc	Butterfly House	U.S.	and Domestic Locations
Caligo eurilochus	Pupae	Display Purposes - Butterfly House	HI, Continental U.S.	Originally Collected from Foreign and Domestic Locations
Caligo memnon	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
C-411-	D	Butterfly House	U.S.	and Domestic Locations
Catonephele mexicana	Pupae	Display Purposes - Butterfly House	U.S.	Originally Collected from Foreign and Domestic Locations
Catonephele	Pupae	Display Purposes -		Originally Collected from Foreign
numilia	1 upae	Butterfly House	U.S.	and Domestic Locations
Cethosia biblis	Pupae	Display Purposes -		Originally Collected from Foreign
Cethosia olons	1 upac	Butterfly House	U.S.	and Domestic Locations
Colobura dirce	Pupae	Display Purposes -		Originally Collected from Foreign
Colocala and	1 upue	Butterfly House	U.S.	and Domestic Locations
Danaus (Radena)	Pupae	Display Purposes -		Originally Collected from Foreign
vulgaris	•	Butterfly House	U.Ś.	and Domestic Locations
Dione juno	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
	-	Butterfly House	U.S.	and Domestic Locations
Dione moneta	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Dryadula phaetusa	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
	_	Butterfly House	U.S.	and Domestic Locations
Dryas iulia	Pupae	Display Purposes -		Originally Collected from Foreign
F 1 . 1	ъ	Butterfly House	U.S.	and Domestic Locations
Eryphanis polyxena	aPupae	Display Purposes -		Originally Collected from Foreign
E - 1.1 11.1	D	Butterfly House	U.S.	and Domestic Locations
Eueides aliphera	Pupae	Display Purposes -		Originally Collected from Foreign
Eueides isabella	Pupae	Butterfly House	U.S.	and Domestic Locations
Euclues Isabella	1 upae	Display Purposes - Butterfly House	U.S.	Originally Collected from Foreign and Domestic Locations
Eueides lybia	Pupae	Display Purposes -		Originally Collected from Foreign
Luciues Tybia	1 upac	Butterfly House	U.S.	and Domestic Locations
Eueides vibilia	Pupae	Display Purposes -		Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Euphaedra	Pupae	Display Purposes -		Originally Collected from Foreign
neophron	•	Butterfly House	U.S.	and Domestic Locations
Eurytides branchus	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Eurytides epidaus	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Graphium doson	Pupae	Display Purposes -		Originally Collected from Foreign
	_	Butterfly House	U.S.	and Domestic Locations
Greta oto	Pupae	Display Purposes -		Originally Collected from Foreign
TT 1	D	Butterfly House	U.S.	and Domestic Locations
Hamadryas	Pupae	Display Purposes -		Originally Collected from Foreign
arinome Heliconius	Dunas	Butterfly House Display Purposes -	U.S.	and Domestic Locations Originally Collected from Foreign
charitonius	Pupae	Butterfly House	U.S.	and Domestic Locations
Heliconius cydno	Pupae	Display Purposes -		Originally Collected from Foreign
Tiencomus cyuno	1 upac	Butterfly House	U.S.	and Domestic Locations
Heliconius doris	Pupae	Display Purposes -		Originally Collected from Foreign
Transcomas dons	- upuc	Butterfly House	U.S.	and Domestic Locations
Heliconius eleuchia	a Pupae	Display Purposes -		Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
1		,		

THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING PPQ HEADQUARTER OFFICIAL VIA EPERMITS.	DATE
Noyae It Widding	
Wayne Wehling	05/06/2019



Heliconius erato	Pupae	Display Purposes -	HI. Continental	Originally Collected from Foreign
	- upuv	Butterfly House	U.S.	and Domestic Locations
Heliconius hecale	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Heliconius	Pupae	Display Purposes -		Originally Collected from Foreign
hewitsoni		Butterfly House	U.S.	and Domestic Locations
Heliconius	Pupae	Display Purposes -		Originally Collected from Foreign
ismenius	D	Butterfly House	U.S.	and Domestic Locations
Heliconius	Pupae	Display Purposes -		Originally Collected from Foreign
melpomene	D	Butterfly House	U.S.	and Domestic Locations
Heliconius sapho	Pupae	Display Purposes -	U.S.	Originally Collected from Foreign and Domestic Locations
Haliaaning gara	Dumas	Butterfly House		
Heliconius sara	Pupae	Display Purposes -	U.S.	Originally Collected from Foreign and Domestic Locations
Idea leuconoe	Pupae	Butterfly House Display Purposes -		Originally Collected from Foreign
idea iedeoiloe	1 upac	Butterfly House	U.S.	and Domestic Locations
Kallima inachus	Pupae	Display Purposes -		Originally Collected from Foreign
Ixamma macnus	Tupac	Butterfly House	U.S.	and Domestic Locations
Lycorea cleobaea	Pupae	Display Purposes -		Originally Collected from Foreign
Ly corea erecouea	Тарис	Butterfly House	U.S.	and Domestic Locations
Mechanitis menapi	sPunae	Display Purposes -		Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Mechanitis	Pupae	Display Purposes -		Originally Collected from Foreign
polymnia	1	Butterfly House	U.S.	and Domestic Locations
Memphis nobilis	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
	•	Butterfly House	U.S.	and Domestic Locations
Morpho	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
granadensis		Butterfly House	U.S.	and Domestic Locations
Morpho peleides	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Morpho	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
polyphemus		Butterfly House	U.S.	and Domestic Locations
Myscelia ethusa	Pupae	Display Purposes -		Originally Collected from Foreign
	-	Butterfly House	U.S.	and Domestic Locations
Opsiphanes cassina	Pupae	Display Purposes -		Originally Collected from Foreign
0 1	D	Butterfly House	U.S.	and Domestic Locations
Opsiphanes	Pupae	Display Purposes -		Originally Collected from Foreign
tamarindi	D	Butterfly House	U.S.	and Domestic Locations
Ornithoptera	Pupae	Display Purposes -		Originally Collected from Foreign
priamus Pachliopta	Pupae	Butterfly House Display Purposes -	U.S.	and Domestic Locations Originally Collected from Foreign
kotzebuea	rupae	Butterfly House	U.S.	and Domestic Locations
Papilio astyalus	Pupae	Display Purposes -		Originally Collected from Foreign
apino astyanus	i upac	Butterfly House	U.S.	and Domestic Locations
Papilio cresphontes	Punae	Display Purposes -		Originally Collected from Foreign
apino crespnontes	Tupac	Butterfly House	U.S.	and Domestic Locations
Papilio memnon	Pupae	Display Purposes -		Originally Collected from Foreign
apino memon	1 upue	Butterfly House	U.S.	and Domestic Locations
Papilio nireus	Pupae	Display Purposes -		Originally Collected from Foreign
	~r	Butterfly House	U.S.	and Domestic Locations
Papilio palinurus	Pupae	Display Purposes -		Originally Collected from Foreign
F - F	<b>.</b> .	Butterfly House	U.S.	and Domestic Locations
Papilio polyxenes	Pupae	Display Purposes -		Originally Collected from Foreign
	•	Butterfly House	U.S.	and Domestic Locations
•		-		

	Fermit Number F320F-19-02140
THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING PPQ HEADQUARTER OFFICIAL VIA EPERMITS.	DATE
Wayne It Midding	
Wayne Wehling	05/06/2019



Parides arcas	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Parides childrenae	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Parides iphidamas	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Parides montezuma	a Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Parthenos sylvia	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Phoebis philea	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Rothschildia lebeau	ı Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Siproeta stelenes	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Tithorea tarricina	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations
Troides	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
rhadamantus	_	Butterfly House	U.S.	and Domestic Locations
Vindula dejone	Pupae	Display Purposes -	HI, Continental	Originally Collected from Foreign
		Butterfly House	U.S.	and Domestic Locations

## PERMIT GUIDANCE

- 1) This permit does not authorize movement or release into the environment of genetically engineered organisms produced with the regulated organisms described in this permit. Importation, interstate movement, and environmental release of genetically engineered plant pests require a different permit issued under regulations at 7 CFR part 340. Any unauthorized interstate movement or environmental release, including accidental release, of a regulated GE organism would be a violation of those regulations. Additional guidance and contact information for APHIS Biotechnology Regulatory Services, can be found at: https://www.aphis.usda.gov/aphis/ourfocus/biotechnology.
- 2) If an animal pathogen is identified in your shipment, to ensure appropriate safeguarding, please refer to <a href="http://www.aphis.usda.gov/import">http://www.aphis.usda.gov/import</a> export/animals/animal import/animal imports an <a href="products.shtml">products.shtml</a>
- 3) If a human pathogen is identified, please refer to the CDC Etiologic Agent Import Permit Program at <a href="http://www.cdc.gov/od/eaipp/">http://www.cdc.gov/od/eaipp/</a>
- 4) This permit does not fulfill the requirements of other federal or state regulatory authorities. Please contact the appropriate agencies, such as the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. Food and Drug Administration, the Centers for Disease Control and Prevention, the APHIS Veterinary Services unit, the APHIS Biotechnology Regulatory Services, or your State's Department of Agriculture to ensure proper permitting.
- 5) If you are considering renewal of this permit, an application should be submitted at least 90 days prior to the expiration date of this permit to ensure continued coverage. Permits requiring containment facilities may take a longer period of time to process.

### PERMIT CONDITIONS

THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING PPQ HEADQUARTER OFFICIAL VIA EPERMITS.	DATE
Wayne It Widding	
Wayne Wehling	05/06/2019



USDA-APHIS issues this permit to William Shepherd, California Academy of Sciences, 55 Music Concourse Drive, San Francisco, California. This permit authorizes the interstate movement of the listed regulated materials/organisms from the listed states to the above address.

- This permit is issued by the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS). It conveys APHIS regulations and requirements for the material(s) listed on this permit. It does not reduce or eliminate your legal duty and responsibility to comply with all other applicable Federal and State regulatory requirements.
  - The permit number or a copy of the permit must accompany the shipment.
  - You must be an individual at least 18 years old, or legal entity such as partnership, corporation, association, or joint venture.
  - You are legally responsible for complying with all permit requirements and permit conditions.
  - If you violate any applicable laws associated with this permit, you may face substantial civil or criminal penalties. We may cancel all current permits and deny future permit applications.
  - Without prior notice and during reasonable hours, authorized Federal and State Regulators must be allowed to inspect the conditions associated with the regulated materials/organisms authorized under this permit.

## 2. The permit holder must:

- maintain a valid PPQ526 permit so long as the regulated materials/organisms are alive or viable,
- not assign or transfer this permit to other persons without APHIS PPQ authorization,
- maintain an official permanent work assignment, residence, or affiliation at the address on this permit,
- notify the Pest Permit Staff as soon as possible of any change in the permit holder's work assignment, residence, or affiliation,
- notify the Pest Permit Staff of the receipt of unauthorized and/or misdirected shipments of regulated materials/organisms,
- adequately mitigate environmental impacts resulting from unauthorized release of regulated

THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING
PPQ HEADQUARTER OFFICIAL VIA EPERMITS.

| Mayne Wehling | 05/06/2019

WARNING: Any alteration, forgery or unauthorized use of this Federal Form is subject to civil penalties of up to \$250,000 (7 U.S.C.s 7734(b)) or punishable by a fine of not more than \$10,000, or imprisonment of not more than 5 years, or both (18 U.S.C.s 1001)



materials/organisms and notify the Pest Permit staff immediately if one occurs,

- notify the Pest Permit Staff if the facility is damaged/destroyed or if you wish to decommission the facility,
- destroy all regulated materials/organisms prior to departure from the organization unless other arrangements are confirmed by the Pest Permit Staff.
- Notifications to the Pest Permit Staff must be made via 866-524-5421 or pest.permits@aphis.usda.gov within one business day of the event triggering a notification.
- 3. All persons working with the listed regulated materials/organisms must be informed of these permit conditions. Anyone working with these materials/organisms must agree to and sign/initial these conditions before beginning work. These signed conditions do not need to be submitted to USDA/APHIS but must be readily accessible and made available to Federal and State regulators upon request.
  - Note: these conditions may be copied and stored electronically for electronic signature and initialing provided that the permit number, authorized materials/organisms and life stages, release locations if applicable, and authorization statement all appear on the document with the permit number. Signing these conditions only indicates that the person working under this permit has read them; the permit holder is the sole responsible party under this permit.
- 4. This permit is only for public display, NOT FIELD RELEASE. Safeguards must be in place in the display facility to completely remove the possibility of release into the environment of these plant pests.
- 5. This permit authorizes INTERSTATE MOVEMENT of pure cultures of these non-indigenous plant-feeding organisms to the identified public display facility. Species identification must be confirmed prior to shipment. Field-collected individuals or contaminated shipments (with soil, plant materials, etc.) may not be moved or held under this permit.
- 6. REQUIREMENTS FOR COCOON/CHRYSALIS (PUPAE) EMERGENCE CAGE (CABINET) In addition to the risks posed by environmental release of these Lepidoptera, the greatest risks from the movement of chrysalids/pupae are disease transmission and the parasitic Hymenoptera (small wasps) and/or Diptera (flies) that often emerge from the pupae. These parasites could impact native Lepidoptera.

To prevent the release of these parasitoids and diseases to the environment it is required that all pupae be emerged in a closed cage/cabinet that will prevent minute parasitic Hymenoptera or Diptera from escaping and will allow for their destruction.

THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING
PPQ HEADQUARTER OFFICIAL VIA EPERMITS.

| Mayor Wehling | 05/06/2019

WARNING: Any alteration, forgery or unauthorized use of this Federal Form is subject to civil penalties of up to \$250,000 (7 U.S.C.s 7734(b)) or punishable by a fine of not more than \$10,000, or imprisonment of not more than 5 years, or both (18 U.S.C.s 1001)



The requirements are as follows:

Ventilation openings in the cage/cabinet must be covered with 60 mesh screen or finer (60 divisions per linear inch in each direction of wire or thread that comprises the mesh) made from materials resistant to UV light degradation (ie. metallic or polymer mesh).

The cage can be constructed of polymer materials (e.g. Acrylic, Plexiglass, Lexan) or other synthetic water-proof materials. Wood is not suitable unless coated with cleanable waterproof coatings. Cage/cabinet surfaces should be constructed of materials that can be readily cleaned/sanitized.

All surfaces must be a monochromatic light color so that parasitoids can be easily seen. There should be no hiding places for parasitoids in the material used to suspend the pupae. Parasitoids will go to the top and to the corners of the cabinet or toward a light source.

The access door must latch and seal tightly.

Interior surfaces must be visually examined for parasitoids prior to opening cages/cabinets, and if detected parasitoids should be removed. This can be done by touching the parasitoids with aspirators, tissues, paint brushes dipped in alcohol or soapy water.

The cabinet must be cleaned on a regularly scheduled basis to reduce the spread of microbial diseases. Cleaning must be done weekly when the cabinet is in regular use.

The emergence cabinet must not open directly into the exhibit area.

7. 1) The permit holder is responsible for arranging continuous staffing by trained designated representative(s) at all entry and exit doors to prevent (a) theft of specimens, (b) the unauthorized entry or exit of people and transported articles, and (c) hitch-hiking butterflies and moths (live regulated organisms perched on people, clothing, and other transported articles) from exiting the display area during all hours that the facility is held open to the public. This scheduling must provide adequate coverage during break and mealtimes. Representatives should be rotated on a schedule that ensures a high level of alertness. Butterfly nets must be kept in or near the entry and exit vestibules.

The display area of the facility must be closed to the public when responsible representatives are not available. Inspection requirements must be met for all "special" and after-close-of-business events such as parties, weddings, receptions, etc.

The permit holder must provide the necessary equipment to allow representatives to (a) conduct thorough visual examinations of people and transported articles, and (b) collect and return any

THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING PPQ HEADQUARTER OFFICIAL VIA EPERMITS.	DATE
Nayme IT Middling	
Wayne Wehling	05/06/2019



found live regulated organisms.

2) Trained designated representatives must be (a) authorized to inspect all persons entering and exiting the facility, (b) authorized to inspect all articles transported into and through the facility, (c) authorized to prevent unauthorized entry or exit of people, (d) trained to recognize theft of live regulated organisms, and (e) trained in proper livestock handling and recovery. Transported articles include, but are not limited to, wheel chairs, strollers, backpacks, purses, jackets, coats, hats, and umbrellas.

Representatives must closely examine (visually) all people and items exposed to free-flying Lepidoptera to determine if they are infested with hitch-hiking live regulated organisms prior to allowing egress from the vestibule. Representatives must be convinced that hitch-hiking Lepidoptera are not present on people and transported articles prior to authorizing egress. This includes asking people to turn around for a full visual inspection, proper use of mirrors, and asking articles to be displayed on all sides. The permit holder is responsible for ensuring all inspections are conducted thoroughly and do not violate civil rights.

- 3) Failure to meet requirements for the inspection of people and transported articles at any time is grounds for immediate closure of the facility, revocation of this permit, and civil and criminal penalties to the fullest extent of the law.
- 8. The permit holder may only receive exotic organisms from individuals or organizations that also hold a valid USDA permit for receipt and/or possession.
- 9. If domestic Lepidoptera are commingled with imported Lepidoptera the domestic Lepidoptera must fully comply with all permit conditions of the valid import permit.
- 10. Reproduction of exotic Lepidoptera is not allowed in the free flight area of the exhibit except as follows: Lepidoptera may be bred in cages within the flight area, or on the premises, when the cages have been approved for specific construction materials and placement during a facility evaluation performed by a PPQ Officer, the cage(s) must seal completely, be covered with 60 mesh screen or glazing, if the cage(s) is accessible to the public it must be locked, the cage(s), the Lepidoptera involved, and the rearing protocol must be detailed in the SOPs and filed with PPQ Headquarters.
- 11. Host plants for exotic Lepidoptera are not permitted as part of the landscaping in the free flight area of the exhibit.
- 12. Standard Operating Procedures (SOPs) must be filed with, and approved by, the APHIS PPQ Pest Permit Staff at: email: pest.permits@aphis.usda.gov; phone: 866-524-5421; fax: 301-734-8700; address: 4700 River Road, Unit 133, Riverdale, MD 20737. All contact information must be kept current and the SOPs must be dated. If requirements in the permit conditions are more restrictive than the SOPs, permit conditions take precedence. APHIS PPQ must approve any changes to the SOPs before implementation.

THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING
PPQ HEADQUARTER OFFICIAL VIA EPERMITS.

| Japan & Malling | 05/06/2019



A list of all persons with access to the containment facility must be maintained and available upon request by Federal or State Regulatory Officials.

- 13. Modifications to the containment facility or any changes that affect the containment of the regulated materials/organisms must be approved by APHIS prior to making changes. Please contact the Pest Permit Staff (email: pest.permits@aphis.usda.gov; phone: 866-524-5421; address: 4700 River Rd., Unit 133, Riverdale, MD 20737; Fax: 301-734-8700).
- 14. There is to be no further movement or distribution of the listed regulated materials/organisms within the United States and its territories unless the recipient holds, or is named as a responsible party on a valid PPQ526 permit for receipt of such materials/organisms.
- 15 DEVITALIZATION AND WASTE DISPOSAL

All regulated materials/organisms and all items coming in direct contact or exposed to the regulated materials/organisms must be sterilized/sanitized/decontaminated prior to removal from the authorized containment facility. This includes all items from shipping, culturing, care, and maintenance of these regulated materials/organisms. This requirement includes but is not necessarily limited to: packaging directly exposed to the regulated materials/organisms, substrates (culture media, soil, plant materials (food materials or host plants)), leftover/unused/unneeded live cultures, and dead specimens/cultures unless specified otherwise in the permit.

All waste materials must be treated by one of the follow methods prior to disposal: Use any of the following, either alone or in combination: 1) autoclaved (see protocol below), 2) disposed of off-site by a facility holding a valid PPQ compliance agreement (organisms and/or contaminated waste must be stored in sealed containers prior to pick up by this company) or, 3) incinerated. If these three options are not available waste may be treated using one of the following: 4) frozen at minus 29 Celsius (minus 20 Fahrenheit) for 72 hours (Note: this is colder than a conventional refrigerator/freezer), 5) immersed in 5,250-6,000 PPM sodium hypochlorite solution (1 part fresh household bleach to 9 parts water) for at least 20 minutes, or 6) immersed in 70 percent alcohol for at least 30 minutes.

Treated waste will be double bagged prior to disposal.

Other sterilization methods are only allowed with prior written agreement from the USDA/APHIS PPQ Pest Permit Staff.

Any equipment, supplies, tools, secondary shipping containers, packing materials (e.g, ice packs), etc. must be sterilized/sanitized/decontaminated prior to reuse, disposal, or removal from containment.

If using an autoclave the following protocol must be used:

- a. Waste must be autoclaved at 121 Celsius (250 Fahrenheit) for a minimum of 30 minutes at 15 psi.
- b. Autoclave tape or other indicators must be placed on each load prior to treatment. The autoclave

THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING
PPQ HEADQUARTER OFFICIAL VIA EPERMITS.

| Mayne # Melding | 05/06/2019

WARNING: Any alteration, forgery or unauthorized use of this Federal Form is subject to civil penalties of up to \$250,000 (7 U.S.C.s 7734(b)) or punishable by a fine of not more than \$10,000, or imprisonment of not more than 5 years, or both (18 U.S.C.s 1001)



tape or other indicator on each container must be checked to verify color change before disposal. c. The autoclave must be calibrated according to the manufacturer's instructions annually and a commercially available biological indicator kit that uses bacterial spores of Geobacillus stearothermophilus that are rendered unviable at 121 Celsius (250 Fahrenheit) must be used every three months.

OR

The autoclave must be calibrated according to the manufacturer's instructions every two years and a commercially available biological indicator kit that uses bacterial spores of Geobacillus stearothermophilus that are rendered unviable at 121 Celsius (250 Fahrenheit) must be used every two weeks.

- d. A written record of the calibration and the biological indicator tests must be maintained. You must follow the manufacturer's instructions for the Geobacillus sterothermophilus and if any growth is observed, you must have the autoclave serviced and retested before it is used again for the regulated articles/organisms listed on this permit.
- 16. The covering over the containment facility must be evaluated weekly for damage of any kind. It must also be examined following any storm. Repair materials must be present at the facility. It is possible for rats to chew through stainless steel
- 17. Dead specimens can be retained and used for study, exhibit, and redistribution. Dead specimens must be frozen at -4C for ten days, -29C for three days, or immersed in an appropriate fixative e.g. 70 percent ethanol, Kahles solution, RNA-later.
- 18. Every January through the duration of this permit, the applicant must submit an inventory for the previous year of the number of each species received from each source. The condition (e.g., healthy, diseased, parasitized, etc.) of pupae received must also be listed. Submit to: APHIS PPQ Pest Permit Staff at: email: pest.permits@aphis.usda.gov; phone: 866-524-54214700; fax: 301-734-8700; address: River Road, Unit 133, Riverdale, MD 20737. Provide permit number and permit holder's name in the subject line.
- 19. REQUIREMENTS FOR CLOSING DOWN THE EXHIBIT

At the close of the exhibit, all plants and Lepidoptera must be disposed of properly. Contact APHIS PPQ Pest Permit Evaluations if you want to redistribute any remaining Lepidoptera live regulated organisms. Permission can be provided to ship to another qualified butterfly house. Otherwise, Lepidoptera must be frozen at -20F for 72 hours prior to disposal. Plant materials kept in the flight house must be destroyed unless they can be kept/held in the butterfly flight area for 3 weeks following the last Lepidopteran flown. If plant materials (including pots and soil) need to be removed from the exhibit sooner than 3 weeks after the last Lepidopteran has flown then everything must be treated with an insecticide suitable for all life stages of Lepidoptera. Consult State Department of Agriculture officials for an approved / registered insecticide that will target

THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING
PPQ HEADQUARTER OFFICIAL VIA EPERMITS.

| Mayne Wehling | 05/06/2019



all life stages in all these different locations. To accomplish this it may be necessary to apply more than one insecticide. After the appropriate reentry time all plants, pots, and soil must be inspected for lepidopteran life stages before removing from the exhibit area. If the plants must be moved to another location at the zoo following the insecticide application then the plants should be reinspected for Lepidoptera 3-4 weeks following application. Re-treat if necessary. If the plants can be held in the butterfly flight area for 3 weeks then the plants, soil surface, and pots must be carefully inspected for eggs, caterpillars, and pupae prior to removing from the evaluated containment facility.

20. Both sexes of Saturniid moths (silk moths) (Saturniidae) cannot fly free in a walkthrough exhibit space. Only one sex can fly free in the exhibit at any given time (the other sex can be caged in an approved exhibit space). Females must not be mated if flying free. These species oviposit without chemical stimulation from host plants and they generally feed on a broad range of hosts.

### **END OF PERMIT CONDITIONS**

	Permit Number P526P-19-02140
THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING	DATE
PPQ HEADQUARTER OFFICIAL VIA EPERMITS.	
Wayne to Whithing	
Wayne Wehling	05/06/2019